REMARKS

The specification has been objected to because of reference errors. The specification has been amended to correct the reference errors.

Claim 21 has been objected to because of an informality. Claim 21 has been amended to correct the informality.

Claims 9 and 23 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Clarifying amendments have been made to Claims 9 and 23. Support for these clarifying amendments is found on page 16, line 8, to page 17, line 16 of the Description of Embodiments. Therefore, the applicants requestfully request the withdrawal of the rejections of claims 9 and 23.

Claims 1-8, 15-22, 28, and 29 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,795,966 ("Lim"). Claims 11, 12, 14, 25, and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lim in view of Rozycki. Claims 10, 24, and 30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lim in view of Collins. Claims 13 and 27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Lim in view of Rozycki and Walker.

With respect to the rejection of claims 1 and 28, the examiner argues that, in column 14, lines 28-40, Lim anticipates running guest software in a processor mode that enables the guest software to operate at a privilege level intended by the guest software. The applicants respectfully disagree.

Column 14, lines 28-40 of Lim describe a virtual machine. The examiner suggests that Lim's mention that applications loaded into the virtual machine run "normally" anticipates that they operate at the privilege level at which they intend to operate. However, Lim's description of a virtual machine does not even mention guest deprivileging or the problems related to guest deprivileging, as discussed from page 8, line 8, to page 10, line 13, of the present application, and therefore cannot anticipate running guest software in a processor mode that enables the guest software to operate at a privilege level intended by the guest software.

Also with respect to the rejection of claims 1 and 28, the examiner argues that, in column 6, lines 45-52, and column 29, lines 15-20, Lim anticipates exiting a processor mode to transfer control over an operation to a VMM running outside the processor mode, responsive to an attempt of guest software to perform the operation, where the operation is restricted by the processor mode. The applicants respectfully disagree.

Column 6, lines 45-52 of Lim describe using a virtual machine monitor as a checkpointing mechanism. Column 29, lines 15-20 of Lim describe taking a checkpoint before any communication with any device not part of the system itself. The examiner adds that the process of taking a checkpoint could be automated, and therefore an attempt by the processor to perform an operation which should come after the checkpoint can be deemed restricted by the processor. One flaw in the examiner's argument is that claims 1 and 28 recite "an operation restricted by said processor *mode*" (emphasis added), by the processor. As argued above, Lim does not anticipate a processor mode that enables the guest software to operate at a privilege level intended by the guest software, and therefore cannot anticipate that it is such a processor mode, rather than the processor, that restricts the operation.

Furthermore, according to the examiner's suggestion, an application would be running on a virtual machine, then a VMM would automatically interrupt the virtual machine to take a checkpoint, therefore an attempt to perform any operation after the checkpoint would be deemed restricted. Lim describes taking a checkpoint as storing state information. Lim does not suggest anything that would result in a restricted operation becoming unrestricted. Therefore, according to the examiner's suggestion, when control was returned to the virtual machine after the checkpoint, the operation would still be restricted and the virtual machine would be interrupted again. The applicants respectfully submit that this scenario is not disclosed by Lim, and even if it were, would not anticipate the present invention.

For at least these reasons, Lim does not anticipate the invention as set forth in independent claims 1 or 28, or independent claim 15, which the examiner rejected based on his argument with respect to claim 1. Also, for at least these reasons, Lim does not

anticipate any of dependent claims 2-8, 16-22, and 29, because Lim does not disclose all of the limitations of the claims on which they depend.

Therefore, the applicants requestfully request the withdrawal of the rejections of claims 1-8, 15-22, 28, and 29.

Regarding the rejections of claims 10-14, 24-27, and 30 under U.S.C. §103, the examiner argues that Rozycki teaches identifying an attempt of guest software to modify an interrupt flag, that Collins renders obvious the addition of a redirection bitmap to the combination of Lim and Rozycki, and Walker discloses that the use of shadow registers is a good way to limit the manipulation of actual registers.

While reserving the right to argue against any of these arguments or the combinations of references, the applicants argue that none of the examiner's arguments with respect to these additional references overcome the reasons that Lim does not anticipate the invention, as argued above. Therefore, no combination of Lim, Rozycki, Collins, and Walker can render the invention unpatentable, and the applicants respectfully request the withdrawal of the rejections of claims 10-14, 24-27, and 30.

CONCLUSION

Based on the foregoing, the applicants respectfully submit that all of the objections and rejections have been overcome and that claims 1 to 30 are in condition for allowance. The applicant therefore respectfully requests the issuance of a Notice of Allowance. Please charge any necessary fees, including extension fees, to our Deposit Account No. 50-0221.

Respectfully submitted,

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Thomas R. Lane
Registration No. 42,781